

REMARKS

Claim 39 is amended. Upon entry of this amendment, claims 39-59 will be pending.

DOUBLE PATENTING

Claims 39-59 have been rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 19-30 in US Patent No. 7,105,779. In response, applicant submits herewith a Terminal Disclaimer with respect to this patent.

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CLAIM REJECTIONS - 35 USC §102

Claims 39-43, 45-54 and 59 are rejected as being anticipated by Arnold et al. (6,011,243) on the basis that the operation of the heat source and other elements of the invention by the controller is nothing more than a desired operation of the device, and that such operation is not structurally limiting and receives no patentable weight in an apparatus claim.

Claim 39 is amended to specify, among other things, that applicant's food holding apparatus comprises, among other things, a control mechanism programmed to vary the heat delivered by each heat source to the food in a respective holding compartment through a duration of holding time during which:

(i) the control mechanism operates to activate the heat source such that said duration comprises a first period of time during which the heat source operates at a first duty cycle whereby the food reaches the selected holding temperature,

(ii) the control mechanism operates to activate the heat source such that said duration comprises a second period of time after the first period of time during which the heat source operates at a second duty cycle different from the first duty cycle whereby the food is held at the selected holding temperature, and

(iii) the control mechanism operates to activate the heat source such that said duration comprises a third period of time after the second period of time at which the heat source operates at a third duty cycle different from the first and second duty cycles whereby the food is maintained at the selected holding temperature.

Support for the above amendment is found in paragraphs 32-36 and 41 and Figs. 8-9 of application as filed.

The prior art of record, including Arnold et al. U.S. Patent No. 6,011,243, fails to show food holding apparatus having applicant's claimed control mechanism, i.e., a control mechanism which is programmed to vary the delivery of heat by the heat sources in the compartments to deliver heat in the manner described in claim 39. As noted in paragraph [0044] of the present application, applicant's claimed control mechanism can be a closed-loop system in which the control mechanism is responsive to signals from sensors (e.g., temperature sensors) in the compartments or a system (open-loop) based on empirical data. Claims 50-52 are directed to the sensor aspects of a closed-loop system.

CLAIM REJECTIONS - 35 USC §103

Claims 55 and 56 are rejected as unpatentable over Arnold et al. in view of Fortmann et al. (5,852,967). Applicant respectfully disagrees.

Claims 55 and 56 depend from claim 39 which recites the structural limitation of a control mechanism which is actually programmed (i.e., contains an embedded program) to vary the delivery of heat by the heat sources in the compartments to deliver heat in the prescribed manner, that is, in three separate time periods during which a heat source operates at three distinct and different duty cycles. For example, as illustrated in Fig. 9B and described in paragraph [0040] of the pending application, a heat source is operated at 100% of maximum power (e.g., a duty cycle of 1.0) during a first time period P1 of a holding duration D to bring the temperature of the pre-cooked food up to the desired holding temperature as quickly as possible, at 0% of maximum power (e.g., a duty cycle of 0.0) during a second period of time P2, after P1, of the holding duration to allow the temperature of the food to stabilize at the selected holding temperature, and at 25% of maximum power (e.g., a duty cycle of 0.25) during a third period of time P3, after P1 and P2, of the holding duration to maintain the food at the selected holding temperature while using less power than in the first phase to extend the quality of the food. As stated in paragraph [0041] of the application, the graphs shown in Figs. 9A and 9B can vary, and the number of phases (time periods) P1, P2 and P3 can also vary.

In Arnold et al., the control system controls the top and bottom heater plates 18a, 18b in each passageway 14a-d to maintain the temperature of each passageway and the food stored there within a predetermined temperature range (see paragraph bridging columns 4 and 5). However, there is no disclosure or suggestion of applicant's three (or more)-period, three (or

more)-duty cycle feature and the attendant advantages thereof. The patent to Fortmann et al. is similarly devoid of any such teaching.

Accordingly, claims 55 and 56 are submitted to be allowable.

Claims 44, 57 and 58 are rejected as unpatentable over Arnold et al. in view of Shei et al. (6,175,099). Applicant respectfully disagrees.

Claims 44, 57 and 58 depend, either directly or indirectly, from claim 39 which recites the structural limitation of a control mechanism which is actually programmed (i.e., contains an embedded program) to vary the delivery of heat by the heat sources in the compartments to deliver heat in the prescribed manner, that is, in three (or more) separate time periods during which a heat source operates at three (or more) distinct and different duty cycles. As explained above, Arnold et al. fails to show or suggest this unique feature, and the Shei et al. patent is similarly devoid of any such teaching.

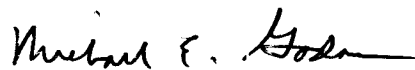
Accordingly, claims 44, 57 and 58 are submitted to be allowable.

CONCLUSION

In view of the foregoing, favorable consideration and allowance of claims 39-59 is respectfully requested.

While no fee is believed due with respect to this AMENDMENT E, the Commissioner is authorized to charge any additional fees due or credit any overpayment to Deposit Account No. 19-1345.

Respectfully submitted,



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